

ABSTRACT OF THE DISCLOSURE

Techniques are disclosed for allocating an N number of registers for use in conjunction with programming code modification, which is usually implemented in code instrumentation. During code instrumentation, new code or “probe” code is added to the block, and, consequently, the original code is changed and/or relocated, resulting in a

5 modified block. In one embodiment, a block of code is associated with an “alloc” statement that uses parameters based on which the programming system allocates the stacked registers for use in that block. Further, the parameters of an alloc statement include an input parameter identifying a number I of input registers, a local parameter identifying a number L of local registers, and an output parameter identifying a number O of output registers. Consequently,

10 the I number of input registers, the L number of local registers, and the O number of output registers are to be allocated. In these conditions, the number N is added to the number O so that additional number N of registers is to be allocated for use in the modified block.